

CLAIMS

What is claimed is:

5        1. A method for configuring an electrical system including a plurality of programmable devices, the method comprising the steps of:  
            providing a configurator adapted to reference a database of device data including data representative of the programmable devices within the system;  
            assembling the plurality of programmable devices into the system;  
10        placing the programmable devices in communication with the configurator; and  
            transferring portions of the database to each programmable device via the configurator, a portion of the database transferred to each programmable device being unique to the respective device.

15        2. The method of claim 1, comprising the further step of creating the database of device data.

20        3. The method of claim 1, wherein the step of assembling includes final assembly of the system.

25        4. The method of claim 1, wherein the step of transferring portions of the database to each programmable device is at least partially performed prior to final assembly of the system.

30        5. The method of claim 1, wherein the portion of the database transferred to each programmable device includes data identifying the device in the system.

            6. The method of claim 5, wherein the portion of the database transferred to each programmable device includes data identifying a physical location of the device in the system.

7. The method of claim 6, wherein the data identifying the physical location identifies a location coordinate and a space occupied by the respective device.

5 8. The method of claim 1, comprising the further step of polling each programmable device to access the portion of the database transferred to the devices.

10 9. The method of claim 1, wherein at least one of the programmable devices includes a data translation module in communication with a device not adapted to receive a portion of the database.

15 10. The method of claim 1, comprising the further steps of making alterations the database following the step of transferring, and updating the portion of the database transferred to at least one programmable device in accordance with alterations to the database.

20 11. A method for configuring a motor control center, the method comprising the steps of:

defining a database for the motor control center including component-specific data representative of programmable electrical components comprising the motor control center;

assembling the components into the system;

placing the assembled components in communication with a configurator, the configurator having access to at least a portion of the component data of the database;

transferring component-specific data from the configurator to respective programmable components; and

25 storing the transferred component-specific data in memory of each respective programmable component.

30 12. The method of claim 11, wherein the programmable devices include at least one motor controller.

13. The method of claim 11, wherein the programmable components are mounted at predetermined locations within the motor control center, and wherein the component-specific data includes data representative of locations of the respective components.

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14. The method of claim 11, wherein the component-specific data includes data representative of function of the respective components in the motor control center.

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15. The method of claim 11, wherein the components of the motor control center are coupled to a data network, and wherein the component-specific data is accessible from the respective components via the network.

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16. The method of claim 15, wherein the configurator transfers the component-specific data via the data network.

17. The method of claim 15, comprising the further steps of making an alteration in the database regarding at least one component and transferring the alteration to the at least one component via the data network.

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18. A method for programming a motor control center (MCC), the method comprising the steps of:

defining a database including entries representative of programmable components of the MCC;

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assembling the programmable components into predetermined locations in the MCC;

downloading into the programmable components respective entries from the database, the entries including data representative of a component designation and a component location; and

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coupling the components to a data network for access of the downloaded entries.

19. The method of claim 18, wherein the database entries include coordinate data identifying an enclosure location of each programmable component.

5 20. The method of claim 18, wherein the database entries include data representative of a function of the components in the MCC.

10 21. The method of claim 18, wherein the database entries include data representative of a wiring configuration of at least one of the components.

22. The method of claim 18, wherein the step of downloading is performed after final assembly of the components into the MCC.

15 23. The method of claim 18, wherein at least one of the components includes a data translation module coupled to a downstream device, the data translation module storing entries from the database representative of a component designation and location for the downstream device.

20 24. A system for configuring networked programmable electrical components, the system comprising:  
a database including data representative of function and location of the programmable electrical components in an installation; and  
a configurator adapted to access data from the database and to transmit the function and location data to respective programmable electrical components.

25 25. The system of claim 24, wherein the configurator is disposed at a component assembly location and is coupled to the components via a temporary data link to transmit the function and location data to the respective programmable electrical components prior to final assembly of the components in the installation.

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26. The system of claim 24, wherein the components are mounted in at least one enclosure in the installation, and wherein the location data in the database represents a final location of the components within an enclosure.

5           27. The system of claim 24, wherein the components are coupled to a data network, and wherein the data transmitted to the components is accessible via the data network.

10          28. The system of claim 27, wherein the configurator is adapted to transmit the data to the components via the data network.

15          29. A system for programming components of a motor control center (MCC), the system comprising:  
                  a plurality of programmable MCC components;  
                  a database including data representative of functions of the components and locations of the components in the MCC;  
                  a configurator adapted to access data from the database, to be coupled the plurality of components, and to transmit to the components respective data entries representative of the functions and locations of the components in the MCC.

20          30. The system of claim 29, wherein the configurator is adapted to be coupled to the plurality of components prior to final installation of the components in the MCC.

25          31. The system of claim 29, wherein the components are coupled to a data network within the MCC.

32. The system of claim 31, wherein the data transmitted to the components is accessible from the components via the network.

33. The system of claim 31, wherein the configurator is adapted to transmit the data to the components via the network.

5       34. The system of claim 29, wherein at least one of the components includes a data translation module coupled to a downstream device, and wherein data is transmitted to the data translation module that is representative of function and location of the downstream device in the MCC.

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